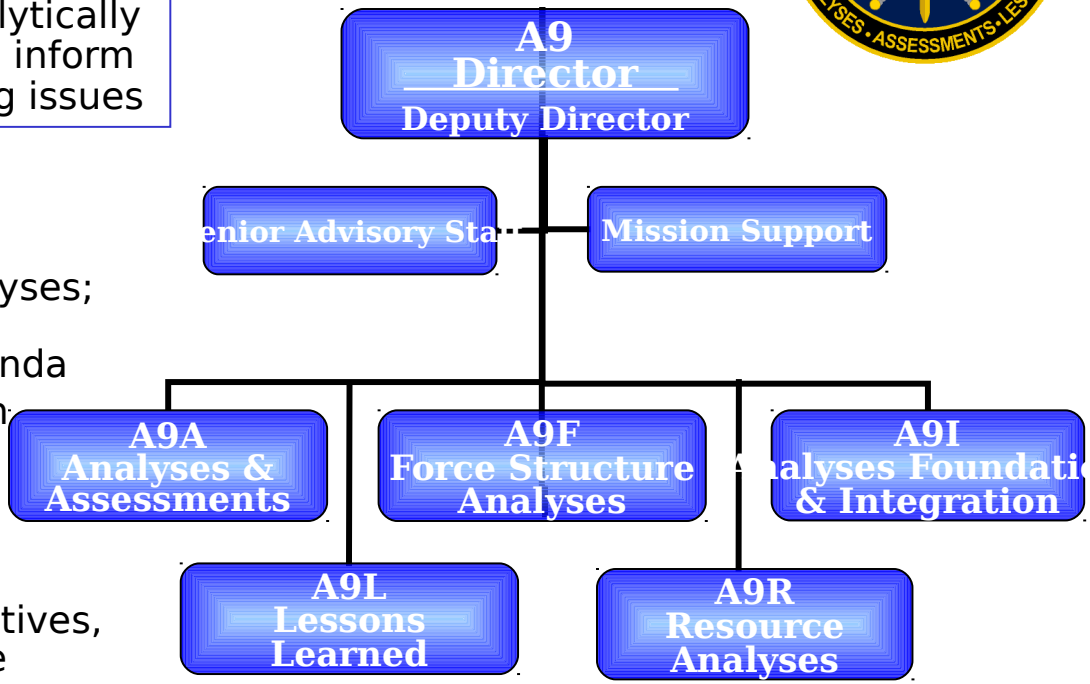
Air Force Studies & Analyses, Assessments and Lessons Learned

U.S. AIR FORCE

Mission

Provide AF-wide policy & guidance and initiate actions to ensure comprehensive, defendable studies, analyses, and lessons learned processes to underpin warfighting & force capability assessments; analytically fireproof SECAF/CSAF decisions; and inform AF leadership responses to emerging issues & external studies.

HQ USAF/A9
Rosslyn, VA



Focus Areas, Roles, Responsibilities

- Integrate & coordinate studies; analyses; baselines -- models, scenarios, data; analytic toolkit models; analytic agenda
- Lessons learned and issue resolution process -- collection, tracking, dissemination
- Mission & campaign level analyses of programs, plans, and ops
- Assess future force structure/alternatives, oversee AF involvement w/DoD-wide studies
- Capabilities & requirements synchronization analysis; optimize personnel and infrastructure
- Lead AF Analytic Community

Primary Customers:

SECAF, SAF/US, CSAF, VCSAF

https://www.my.af.mil/gcss-af/afp40/USAF/ep/globalTab.do?command=org&cha

U.S. AIR FORCE

Air Combat Command
Analyses & Lessons Learned

Mission

Provide Analyses, L2 and AFSO21 support to ACC Units, ACC Directors and the Combat Air Forces to improve effectiveness and efficiency.

HQ ACC/A9
Langley AFB, VA

Focus Areas, Roles, Responsibilities

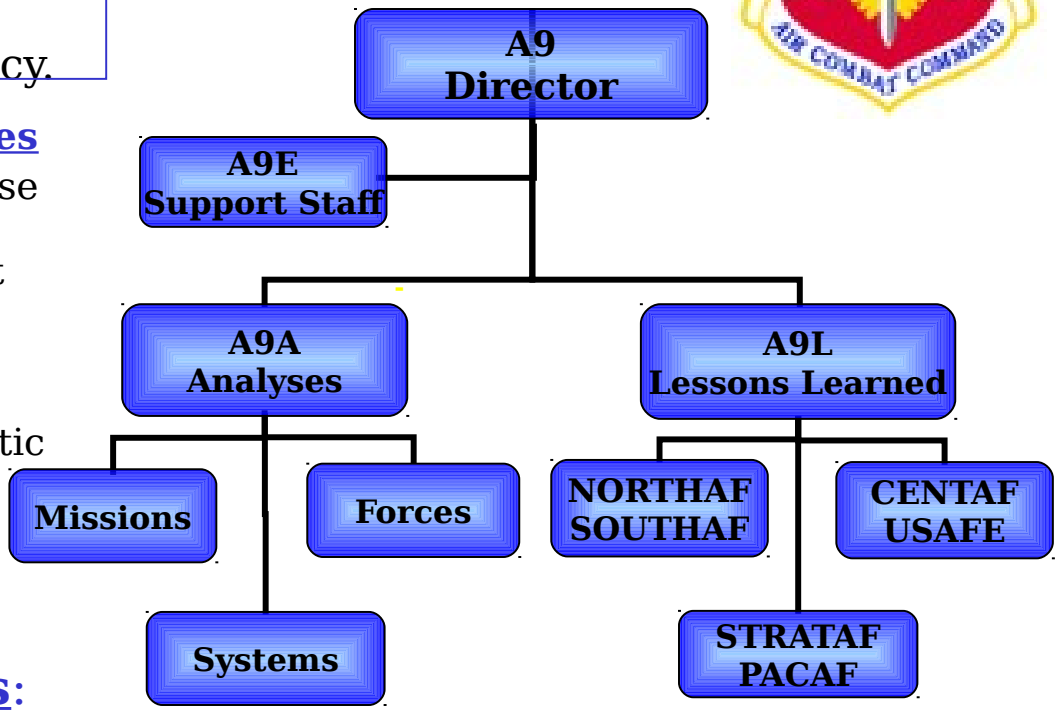
Coordinate & present analytical expertise and processes for ACC & CAF ISO current and future forces/capabilities (esp. ACC Directorates)

Coordinate & present operational analytic capabilities (esp. WFHQs)

Coordinate & present L2 capabilities (esp. WFHQs)

Coordinate, orchestrate & present AFSO21 capabilities (esp. ACC Wings)

Provide Cross-tell and integrate with HAF/A9



Primary Customers:

ACC/CC, HQ ACC Staff, Combat Air Forces

Portal – search "ACC/A9"

U.S. AIR FORCE

Air Education & Training Command

Studies & Analysis Sqdn

HQ AETC/ SAS
Randolph AFB, TX

Mission

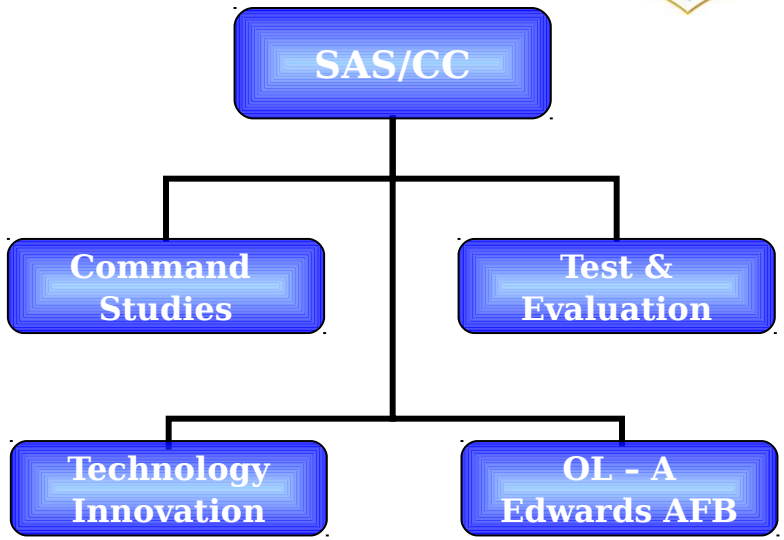
Enhance AETC training and education by conducting studies; performing operational tests; evaluating new ideas & technologies; and assessing and developing training programs.

Focus Areas, Roles, Responsibilities

- Training requirements systems analysis
- Training capabilities and resource analysis
- Analytical advice
- Technology solutions
- Testing & evaluation

Primary Customers:

AETC/CC, HQ AETC Staff



http:aetc.sas-css@randolph.af.m

U.S. AIR FORCE

Air Force Materiel Command

Management Sciences Division

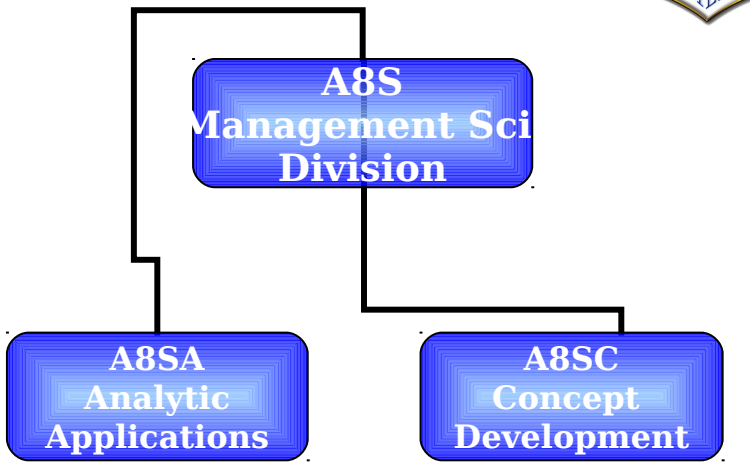
HQ AFMC/A8S
W-P AFB, OH

Mission

Provides resource and policy analysis services to the HQ staff, AFMC Centers, and other customers. Enables effective and efficient planning, programming, execution, and performance measurement.

Focus Areas, Roles, and Responsibilities

- AF OPR for supply chain modeling
- Develops/maintains models for managing $29B inventory of spare parts
- Expertise in weapon system availability modeling
- Conducts capability assessment and sustainment analysis
- Provides consultation on inventory optimization techniques
- Provides decision support analysis for corporate AFMC issues



Primary Customers:

AFMC/CC, HQ AFMC Staff, AFMC Centers

https://www.my.af.mil/afp40/USAF/ep/globalTab.do?command=org&chann

Air Mobility Command
Analysis, Assessments & Lessons Learned

U.S. AIR FORCE

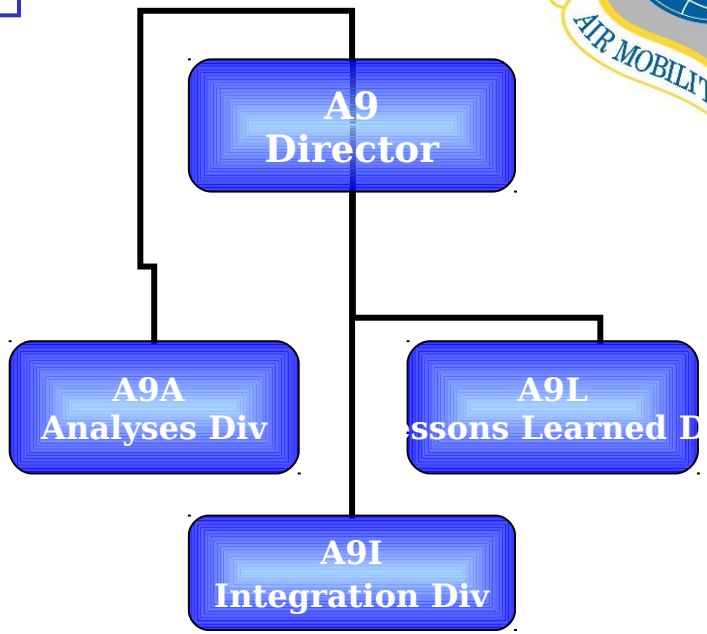
Mission

Provide analyses, operational assessments, and lessons learned to support senior-level AF and Combatant Commander decisions regarding Mobility Air Force capability and programmatic issues.

HQ AMC/A9
Scott AFB, IL

Focus Areas, Roles, Responsibilities

- Perform/integrate/coordinate studies and analyses
- Mission-, campaign-, and strategic-level mobility analyses of programs, plans, and ops
- Baselines -- models, scenarios, data; analytic toolkit models; analytic agenda
- Mobility lessons learned & issue resolution process -- collection, tracking, dissemination
- Assess future force structure/alternatives, oversee USAF & DoD-wide studies related to air mobility
- Capabilities & requirements synchronization analysis; optimize personnel and infrastructure
- Assess impact of decision alternatives on the Global Transportation Network;



https://private.amc.af.mil/a9/a9.cfm

Air Force Space Command
Analyses, Assessments and Lessons Learned

U.S. AIR FORCE

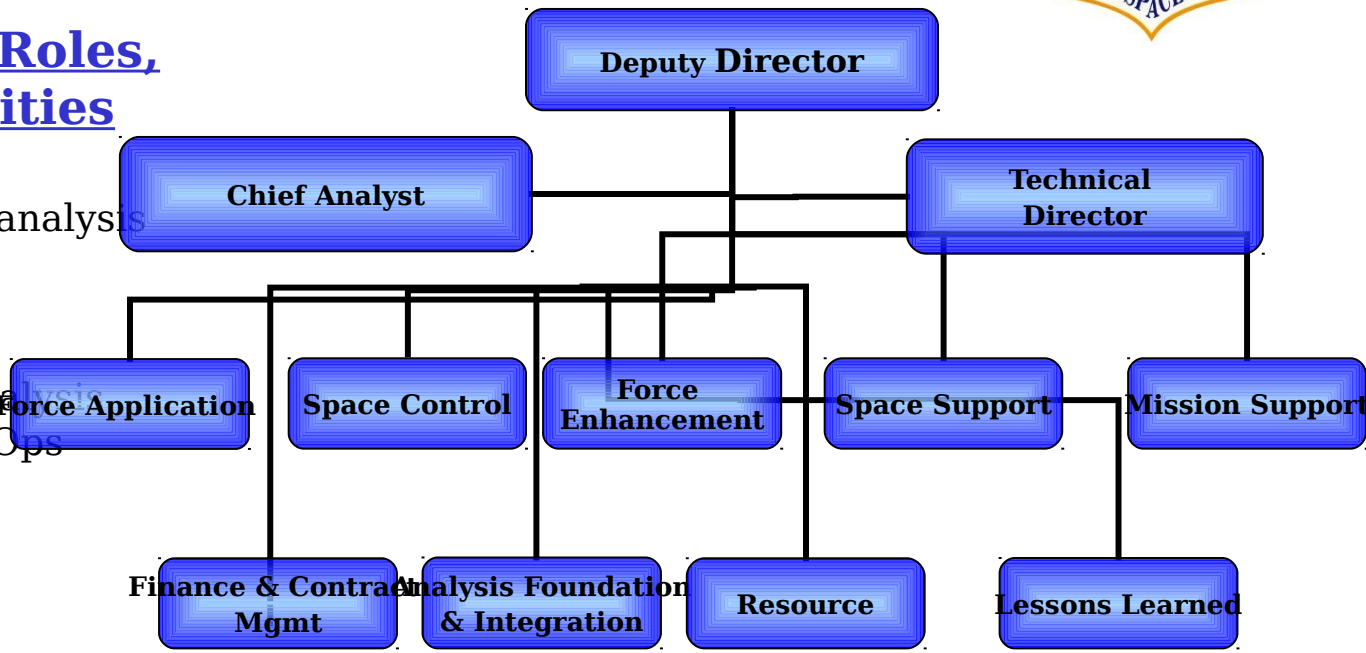
Mission

Provide objective and responsive space studies, analysis and assessments, lessons learned and science & technology expertise to decision makers, warfighters, and the national space community

HQ AFSPC/A9
Peterson AFB, CO

Focus Areas, Roles, Responsibilities

- Military Utility Analyses
- Cost / Cost Effectiveness analysis
- M&S
- Astrodynamics
- Satellite orbit analysis
- Integrated Investment Analysis
- Space & Missile Current Ops
- Requirements Generation
- Missile Warning /Missile Defense
- S&T facilitation



Primary Customers

AFSPC/CC, HQ AFSPC Staff, AFSPC Numbered Air Forces, AFSPC WGs, USSTRATCOM

https://halfway.peterson.af.mil/afspcxpy/

U.S. AIR FORCE

Air Force Special Ops Command

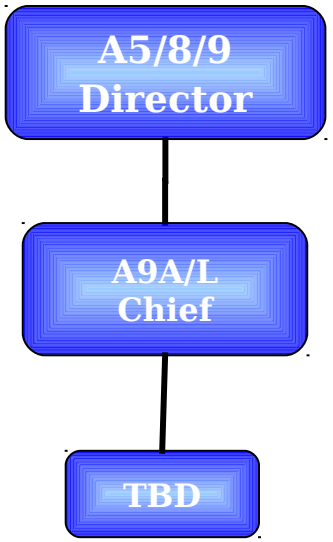
Mission

Provide oversight of major acquisition programs, manned and unmanned aircraft modifications, and advanced science and technology initiatives

HQ AFSOC/A9
Hurlburt Field, FL

Focus Areas, Roles, Responsibilities

- Provides all MAJCOM long-range planning and USAF strategic planning process analytical efforts
- Provides analytical support for commander on strategic planning, programming, TTPs, doctrine, QDR-like studies, AoAs
- Orchestrates DoD-analytical efforts to develop AFSOC Capability Analysis Documents (CADs)
- Manages a repository of over 400 inputs and distributes lessons observed and learned to inform and guide planning and execution



https://www.afsoc.af.mil/

Primary Customers:

AFSOC/CC, HQ AFSOC Staff, USSOCOM

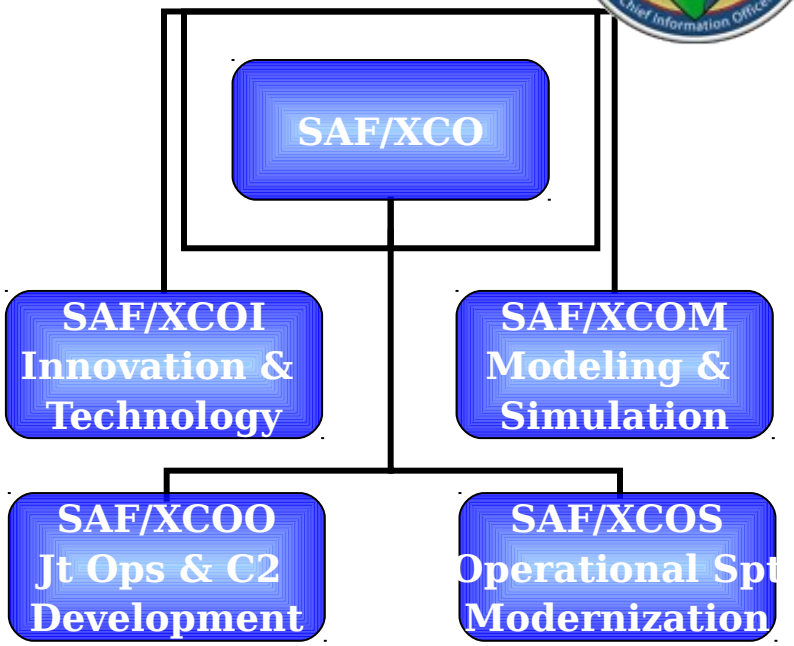
U.S. AIR FORCE

Secretary of the Air Force Ops & Spt Integration Directorate

Mission

Fashion a fast, flexible, agile, horizontally integrated operational support (including business) process and system infrastructure that supports and enables fast, flexible, agile, and lethal combat forces. Oversee AFAMS and has a direct coordination role with AFC2ISRC.

SAF/XCO
Washington, DC



Focus Areas, Roles, and Responsibilities

- AF Modeling and Simulation policy and HQ funding.
- Predictive command and control
- Responsible for the development and analysis of the warfighting architecture, known as the Command and Control (C2) Constellation
- Air Force / Joint experimentation, Air Force Battlelabs, and Advanced Concept Technology Demonstrations (ACTDs) to achieve modernization objectives
- Integration of operational support (business and combat support) capabilities and recommends actions to resolve cross-program integration issues and initiatives

https://www.safxc.hq.af.mil/xco.htm

Primary Customers:

U.S. AIR FORCE

Secretary of the Air Force Modeling and Simulation Policy Division

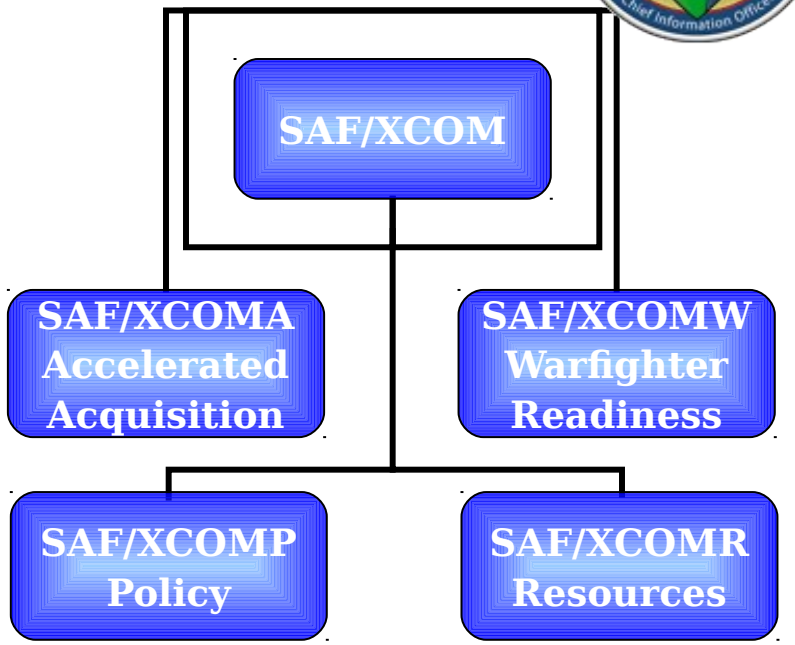
Mission

Develops Air Force M&S policy, guidance and standards in support of warfighter readiness, accelerated acquisition, and new and emerging concepts development and assessment.

SAF/XCOM
Washington, DC

Focus Areas, Roles, and Responsibilities

- PEM for 27601F (USAF M&S), 27605F (Wargaming and Sim Centers), 91227F (AFAMS)
- M&S Policy (M&S Vision, AFPD 16-10 and most subordinate AFIs, DoD M&S Policy)
- M&S Thrust Area co-chair or representative: Accelerated Acquistion, Warfighter Readiness, New and Emerging Warfighting Capability, M&S Foundations
- DoD M&S fora representative



Primary Customers:

HAF (A3, A4/7, A5, A6, A9), SAF/AQ, AFMC, PACAF, USAFE, AFAMS, AF/TE, AFOTEC, NASIC, OSD (AT&L, PA&E, P&R), JFCOM/J7/J9, ACC, ASC, ESC, AAC

https://www.safxc.hq.af.mil/xcom/xcom.htm

Air Force Agency for Modeling and Simulation

U.S. AIR FORCE

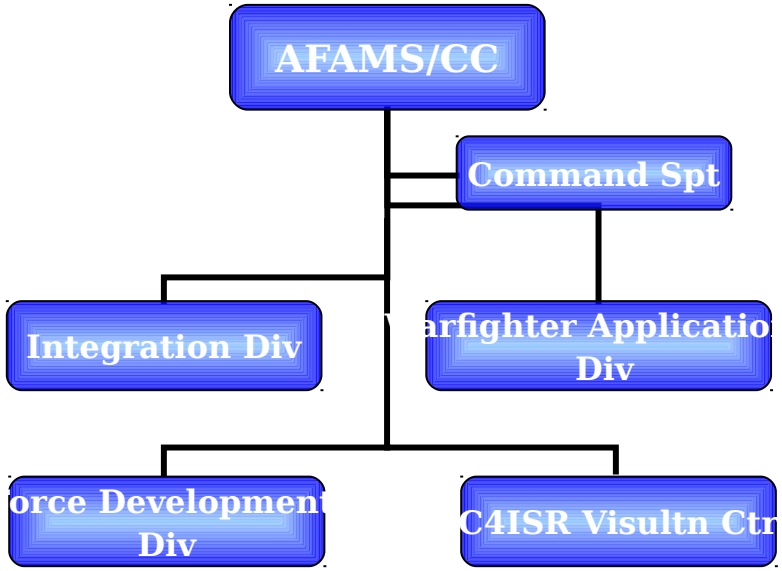
Mission

Air Force lead for translating policy/direction into effective Modeling and Simulation capabilities integrated across the Air Force and with the rest of the Department of Defense

AFAMS
FOA of SAF/XCO
Orlando, FL

Focus Areas, Roles, and Responsibilities

- Implement USAF/Joint/DoD M&S policy & standards
- Support corporate Air Force M&S planning, requirements, and investments
- Support establishment, transition, & integration of major USAF M&S initiatives
- Support Air Force decision-making and mission execution



Primary Customers:

OSD, All Services, AF MAJCOMS, CENTCOM, EUCOM,NORTHCOM, PACOM, SOCOM, JFCOM, JNTC, DMSO, AFSAA, AFOTEC, Service Academies,

https://www.my.af.mil/gcss-af/afp40/USAF/ep/globalTab.do?command=org&channe

16 AF/A9
Operational Analysis Directorate

U.S. AIR FORCE

Mission

Provide expert analytic support to 16 AF Senior Decision Makers, initiating actions to ensure comprehensive, defendable decisions, analyses, Red Teaming and lessons learned processes to underpin warfighting & force capability assessments

16 AF/A9
Ramstein AB, GE

Focus Areas, Roles, Responsibilities

-Manage AFFOR Operational Data

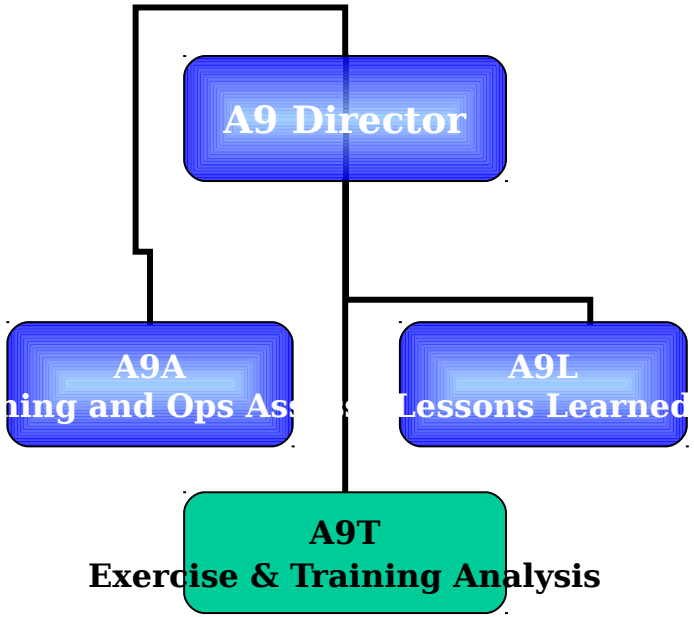
-Develop AFFOR Effects Based Measures

-Provide Deliberate, Contingency, Crisis, and Adaptive Planning Support

-Provide AFFOR Qualitative and Quantitative Analyses that Directly Support the Employment and Sustainment of Air, Space, and Information Power

-Support AOC Operations Assessment Team

-Provide AFFOR & AOC Lessons Learned & AAR



Kenney Headquarters
Analyses, Assessments & Lessons Learned

U.S. AIR FORCE

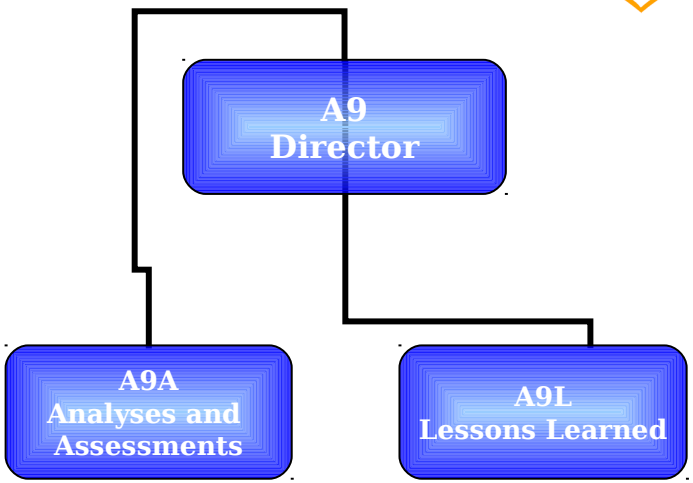
Mission

Provide responsive and relevant operational analysis and decision support to improve warfighting efficiency and effectiveness

KHQ/A9
Hickam AFB, HI

Focus Areas, Roles, Responsibilities

- Integrated analysis and assessment of the air, space and information operations campaign and execution for predictive battlespace awareness across the AOC, AFFOR and special staff
- Effects based operations assessment
- Operational Assessment Team support
- Collect, report, and disseminate critical information necessary to analyze, assess, and document air, space, and information campaigns, contingency operations, and document lessons observed
- After Action Review development and facilitation



https://khq.ops.hickam.af.mil/cfm/default.cfm

HQ USAF Manpower and Personnel

Force Management Policy Div

HQ USAF/A1PF
Crystal City, VA

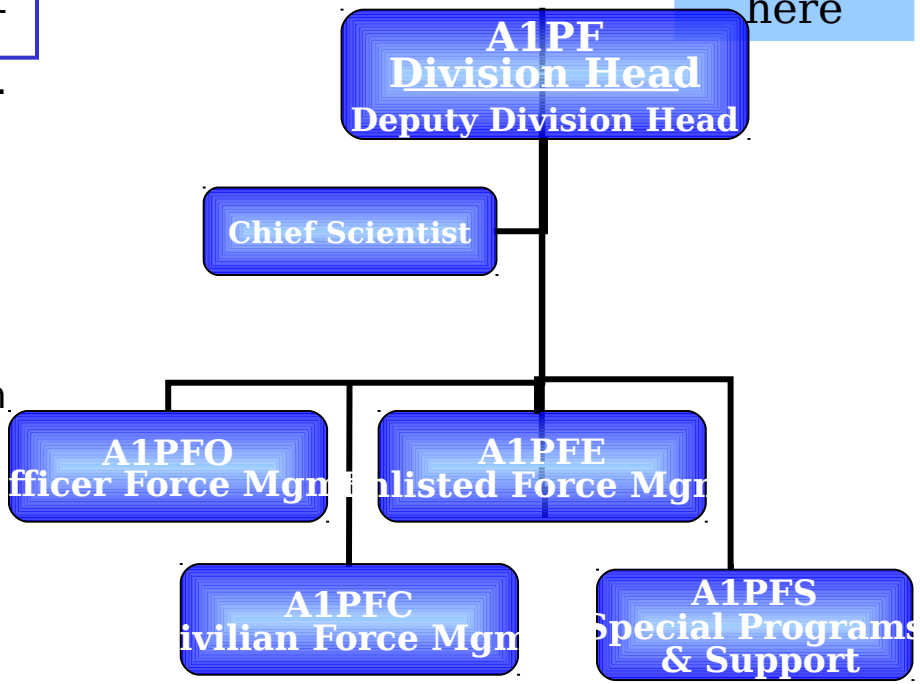
HQ USAF or AF/A1 Emblem here

Mission

Establish force management policies which create and sustain a diverse, agile, expeditionary force responsive to commanders' evolving human capability requirements. Develop models and conduct analysis to support accessions, promotion, retention, bonus, and force shaping policies.

Focus Areas, Roles, and Responsibilities

- Career Field Health
- Force Shaping Analysis
- Selective Reenlistment Bonus Optimization
- Officer 5-year Promotion Plan
- Career Job Reservation Analysis
- Ad Hoc Personnel Policy Analytic Support



Primary Customers:

HQAF/A1, CSAF, Career Functional Managers (CFMs)

http://www.af/a1pf

Air Force Personnel Center
Analysis Branch

U.S. AIR FORCE

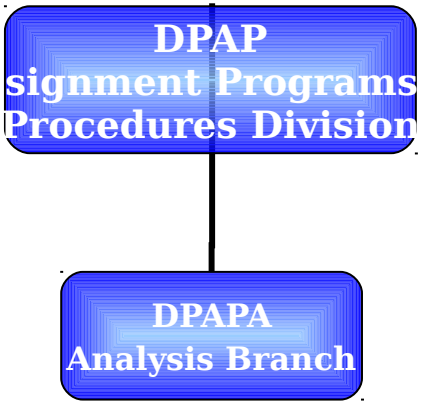
Mission

Conduct studies and analyses that span the personnel life cycle - accessions, compensation, benefits, separations, and retirements. Provide operational support to AFPC's Force Development mandate by providing analytical products, reports, and briefings.

AFPC/DPAPA
FOA of HQ USAF/A1
Randolph AFB, TX

Focus Areas, Roles, and Responsibilities

- Development Team support including specialty health assessments, year group analyses, and skill-pairing vector targets
- Officer promotion analysis – board results and promotion trends
- Optimization models, such as IDE/SDE classification, General Officer skill pairing, ROTC and USAFA classification models
- Sustainment Analysis – modeling to forecast specialty inventories, set accession targets, determine force shaping policies
- Custom analyses – tailored projects for Air Force-wide customers



http://ask.afpc.randolph.af.mil/

Primary Customers: Air Force - Wide

Integrity - Service - Excellence

U.S. AIR FORCE

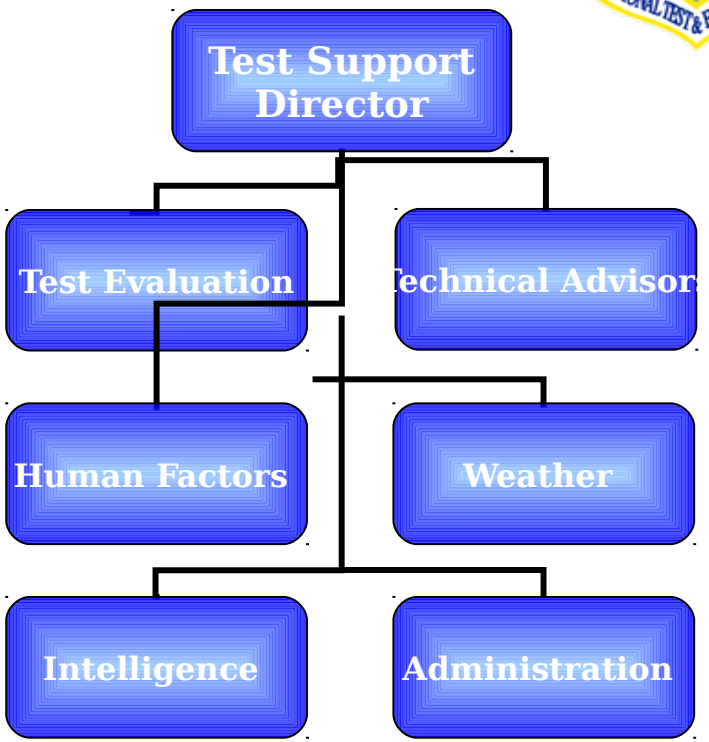
AF Operational Test & Eval Center

Test Support Director

AFOTEC/TS
Kirtland AFB, NM

Mission

Provide technical capabilities and information needed to scope, plan, execute, and report independent Operational Test & Evaluation and other AFOTEC activities.



Focus Areas, Roles, and Responsibilities

- Expert consultation, specialized support, and analytical tools for test teams
- Critical review of test concepts, analytical approaches, and test program documents
- Test design, modeling and simulation, data collection and analysis
- Analytical support for headquarters programs and projects

http://www. afotec.af.mil

Primary Customers:

6 AFOTEC Detachments, Test Teams,

Office of Aerospace Studies

U.S. AIR FORCE

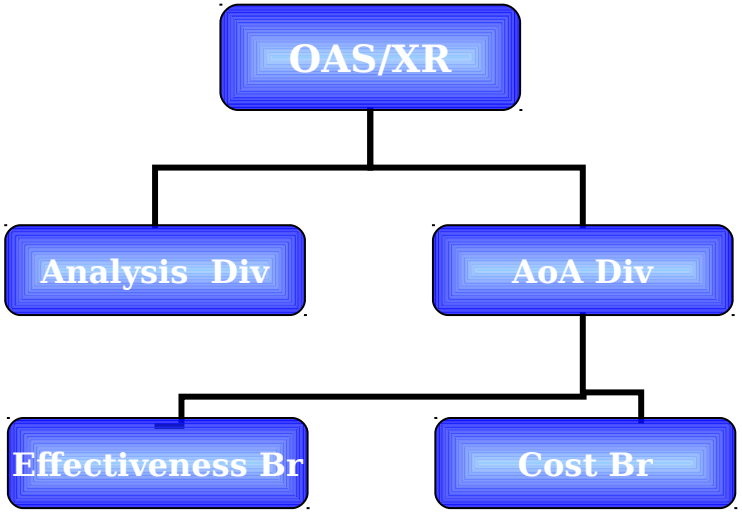
Mission

The AF Analysis of Alternatives (AoA) Center of Expertise. Provides MAJCOMs and Air Staff training and guidance to plan, execute and report AoAs and related studies supporting AF/Joint acquisitions. Supports analysis requirements for select exercises and contingency operations.

OAS
FOA to HQ AFMC A2/5
Kirtland AFB, NM

Focus Areas, Roles, and Responsibilities

- AoA assessments for AFROCC
- AoA training, plans, execution help for MAJCOMS
- Requirements, capabilities, acquisition, military utility, cost-benefit analysis support
- Analysis support for exercises, wargames, and deployments



www.oas.kirtland.af.mil/

Primary Customers:
AFROCC, Air Staff, OSD, MAJCOMS, AFMC Labs

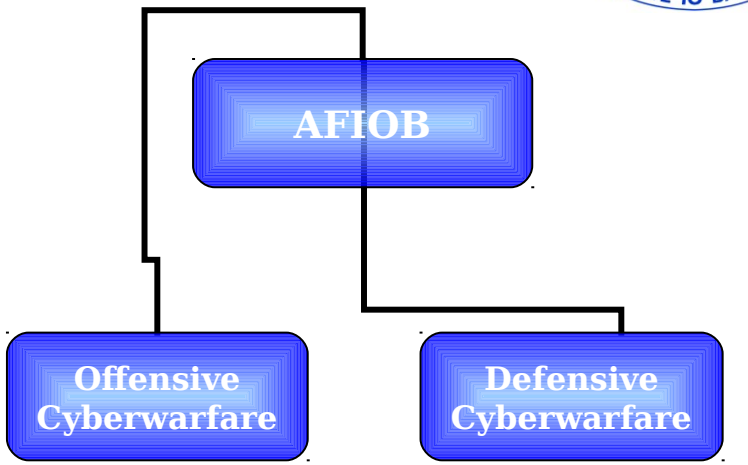
U.S. AIR FORCE

Air Force Information Operations Battlelab

Mission

The Air Force Information Operations Battlelab's mission is to rapidly identify innovative and superior material or non-material ways to plan and employ information operations capabilities, to organize and train forces for information operations, and to influence IO doctrine and tactics in order to meet current and emerging missions.

AFIOB
FOA of HQ USAF/A6
Lackland AFB, TX



Focus Areas, Roles, and Responsibilities

- Conduct periodic Warrior Outreach events at all MAJCOMs to compile the top IO needs in all mission areas
- Conduct technology reviews to identify mature technology that can be rapidly leveraged to address current IO needs
- Solicit Industry, government, and academia for innovative concepts that have the potential to enhance capabilities of the IO warrior
-Execute technology demonstrations of top concepts and facilitate transition to the warfighter

http://afiwcweb.lackland.af.mil/battlelab

Primary Customers:

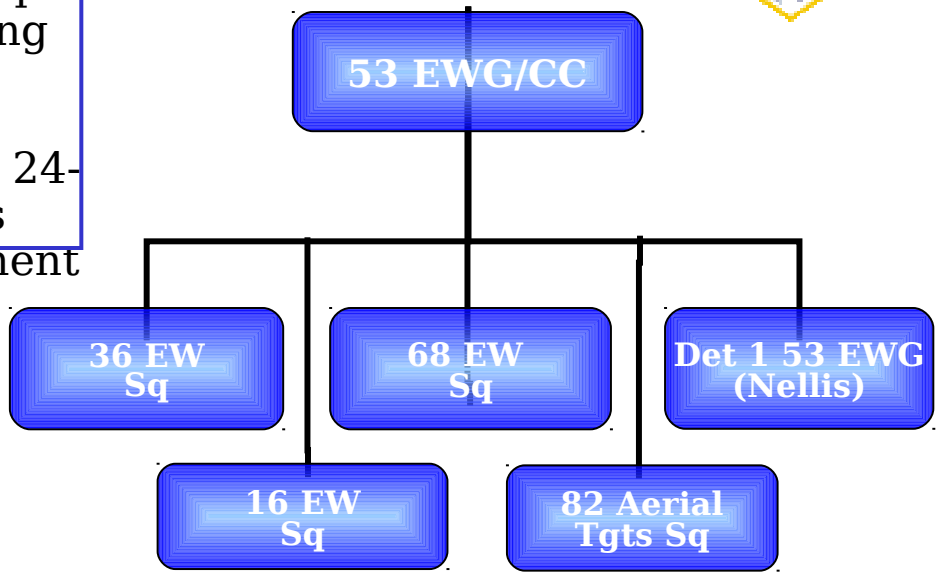
U.S. AIR FORCE

53d Electronic Warfare Group

Mission

Combat Air Forces' (CAF) primary provider of electronic warfare technical, operational, and maintenance expertise. Give aircrews the best chance of surviving threat engagements. Develop and field improved EW system jamming techniques and threat detection capability through field evaluation, testing, foreign materiel exploitation. 24-hour contingency response. Conducts Combat Shield EW readiness assessment program across the CAF.

53 EWG
Eglin AFB, FL



Focus Areas, Roles, Responsibilities

- EW Mission Data Development
- Foreign Military Exploitation
- EW Operational Test
- Chaff, Flares, Expendables, Towed Decoys

https://wwwmil.53wg.eglin.af.mil/orgs/53EWG/MILWEB/

Primary Customers:

Combat Air Forces

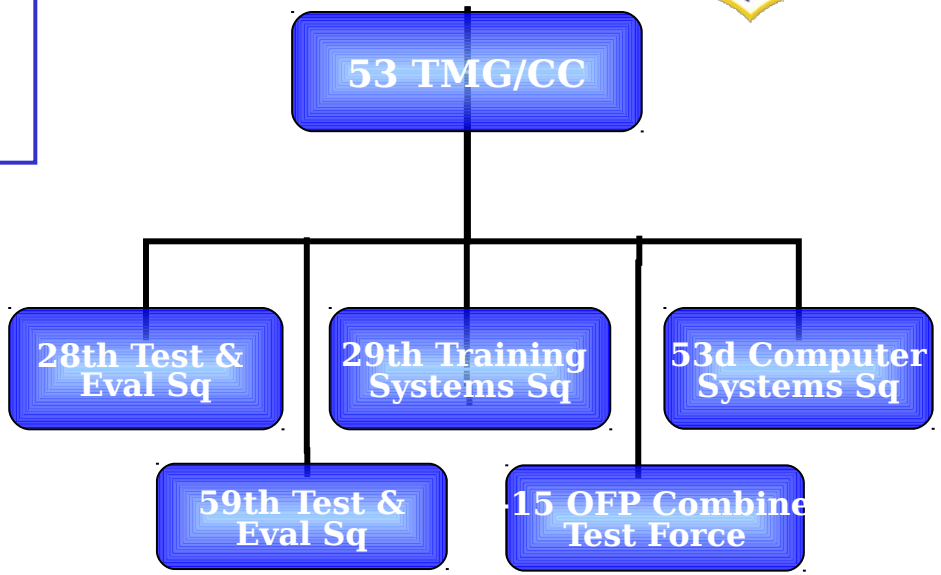
U.S. AIR FORCE

53d Test Management Group

Mission

CAF lead for planning, executing, analyzing & reporting operational tests. 200 ACC operational tests annually. Improve warfighters' combat capability by fielding effective and suitable systems and capabilities. Develop new tactics and employment concepts. Scope includes fighters, bombers, UAVs, EW, weapons, sensors, chem defense, agile combat support, mission planning and aircrew training systems.

53 TMG
Eglin AFB, FL



Focus Areas, Roles, Responsibilities

- Force Development Evaluations (OT&E)
- Support AFMC, AFRL, Battlelabs, AFOTEC tests
- Tactics Development Evaluations
- Direct test for AOR Urgent Need Requests
- Foreign Comparative Tests

Primary Customers:

ACC Directors of Requirements and Operations
Combat Air Forces

https://wwwmil.53wg.eglin.af.mil/orgs/53TMG/Milweb/index.htm

53rd Test & Evaluation Group

U.S. AIR FORCE

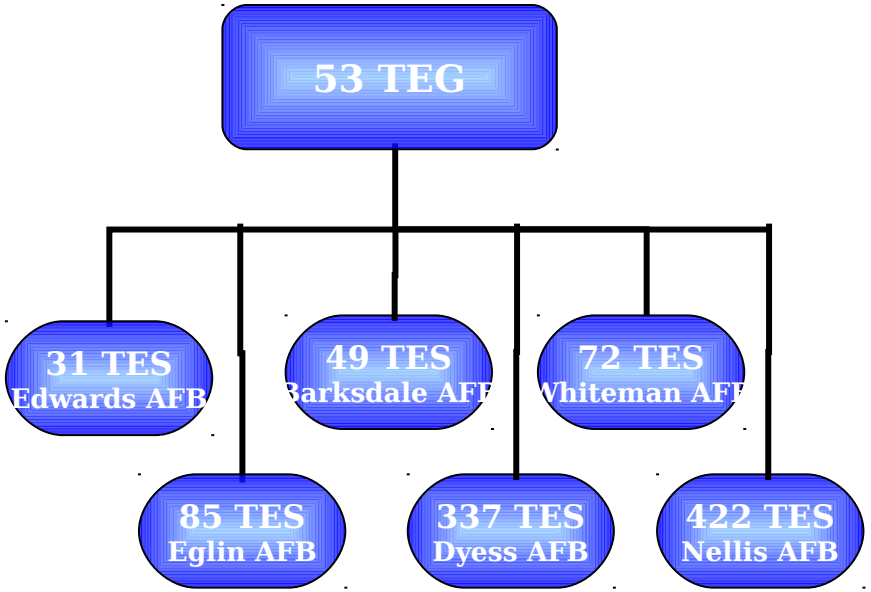
Mission

Effectively execute Operational Tests, and develop Advanced Tactics and Techniques for the Warfighter

53 TEG
Nellis AFB NV

Focus Areas, Roles, Responsibilities

- Operational test on 61 total CB Coded Airframes
  -- Fighters, bomber, CSAR, RPA, ISR
- Improve warfighter's combat capability
- Executes Operational Test and Tactics development
- Effectively fields best equipment and procedures



https://robert.drabant@nellis.af.mi

Primary Customers:

Combat Air Forces (CAF) warfighters, Air Combat Command Staff, Air Warfare Center

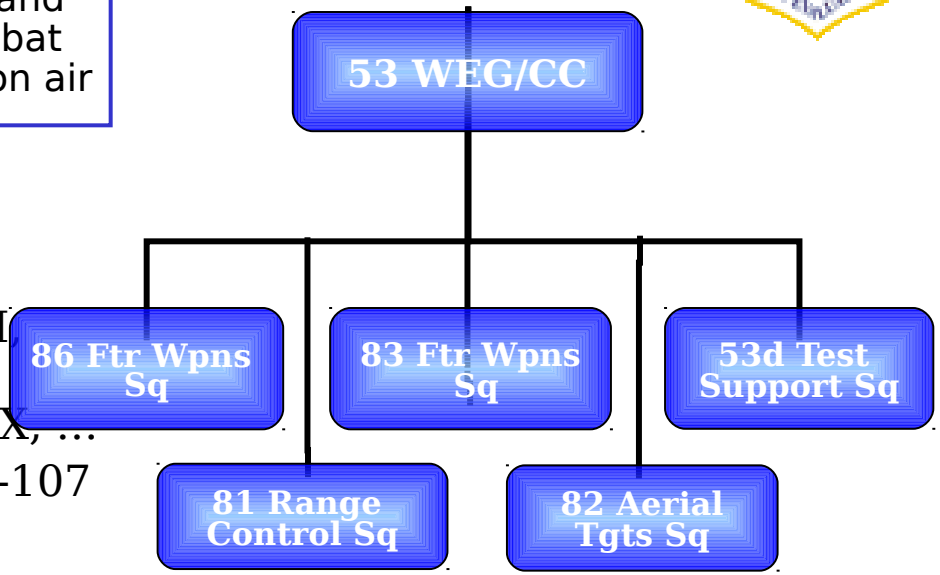
53d Weapons Evaluation Group

U.S. AIR FORCE

Mission

Under COMACC direction, execute annual air to air (Combat Archer) and air to ground (Combat Hammer) Weapon Systems Evaluation Program (WSEP.) Ensures the effectiveness of the end-to-end kill chain for our CAF. Supply aerial target support for all DoD requirements at Tyndall and elsewhere. Supply, score and evaluate combat units employment of more than 300 precision air and surface weapons annually.

53 WEG
Tyndall AFB, FL



Focus Areas, Roles, Responsibilities

- Combat Hammer: 300 JDAM, JASSM, LGB, …
- Combat Archer: 350 AIM-120, AIM-9X, …
- Aerial targets: QF-4, BQM-34, MQM-107
- Air-to-Air missile meet (William Tell)

Primary Customers:

Air Combat Command and Combat Air Forces
DoD Test Agencies needing aerial targets

https://wwwmil.53wg.eglin.af.mil/orgs/53WEG/Milw

USAF Academy
Department of Mathematical Sciences

U.S. AIR FORCE

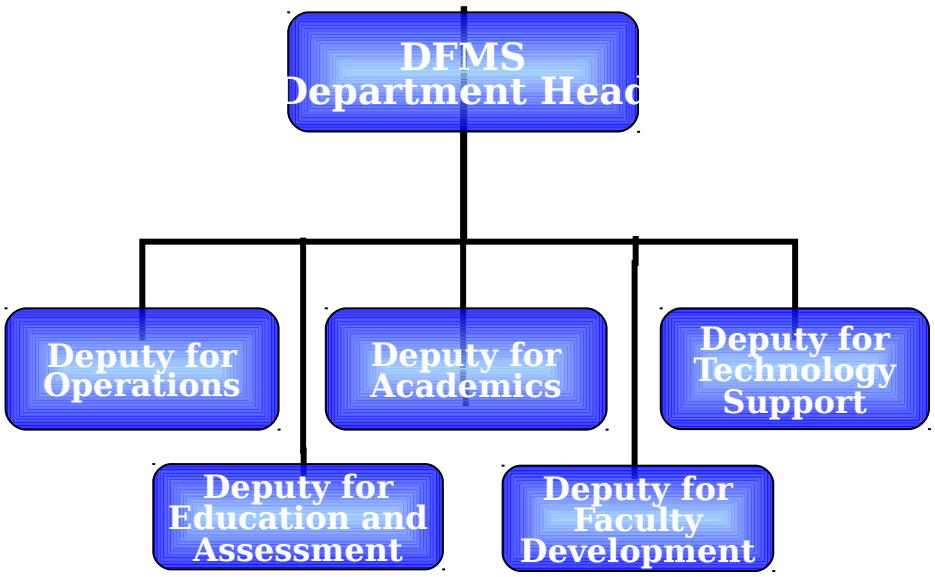
Mission

To educate, train, and inspire men and women to become officers of character, motivated to lead the United States Air Force in service to our nation.

USAFA/DFMS
USAF Academy, CO

Focus Areas, Roles, and Responsibilities

- Students will effectively communicate topics related to mathematics or statistics.
- Students will frame and resolve a wide variety of problems related to mathematics and statistics.
- Students will identify and use technology appropriate to the problem solving process.
- Students will apply mathematical and statistical knowledge across related disciplines.
- Students will take responsibility for their own education.



http://www.usafa.af.mil/df/dfms/?catname=Dean%20of%20Faculty

Primary Customers:

U.S. AIR FORCE

Air Force Logistics Management Agency

Mission

Study/analyze logistics problems and provide AF-wide solutions and innovation to deliver the most effective agile combat support across the full spectrum of operations

Generating solutions today, shaping tomorrow's logistics

AFLMA

FOA to HQ USAF/A4P

Maxwell AFB – Gunter Annex AL

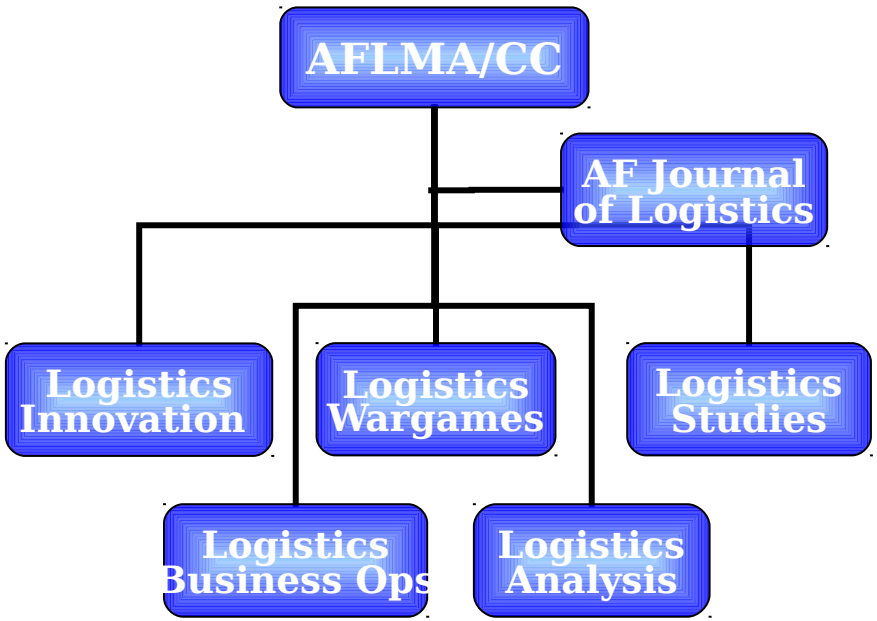
Focus Areas, Roles, and Responsibilities

- Bring staff breadth & depth to logistics analysis table: aircraft maintenance, supply, transportation, log plans, contracting, fuels, and wargaming

- Support logistics strategic plans published by the Joint Staff/J4, UDSD(L), HQ USAF/A4/7, and MAJCOM Directors of Logistics

- Develop, evaluate, and recommend new or improved policies, procedures, and systems to enhance the efficiency and effectiveness of USAF logistics

- Clearinghouse for logistics studies, publishes the Air Force Journal of Logistics.



http://www.aflma.hq.af.mil

Primary Customers:

AF/A4, MAJCOM A4's, Title X wargames, AF Battlelabs

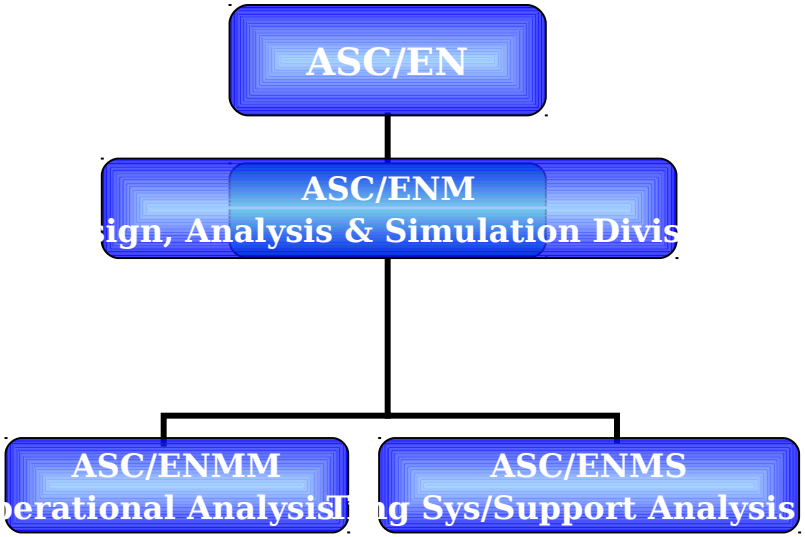
U.S. AIR FORCE

Aeronautical Systems Center
Design, Analysis & Simulation Division

ASC/EN
W-P AFB, OH

Mission

Enhance aeronautical systems acquisition by providing quantitative decision support data in the areas of weapon system's combat effectiveness, supportability, reliability and maintainability, vulnerability and live fire test & evaluation.



Focus Areas, Roles, and Responsibilities

ENM provides Customers with data to support Joint Capabilities Integration and Development System (JCIDS), Analysis of Alternatives (AoA), Concept and Technology Assessments, and Requirements Analysis. ENM retains experts in analyses related to combat effectiveness, engagement kill chain, physical vulnerability, reliability and maintainability, and supportability.

https://www.en.wpafb.af.mil/

Primary Customers:

ASC Wings, HQ AFMC, MAJCOMS

U.S. AIR FORCE

Aeronautical Systems Center/ Capabilities Integration Directorate

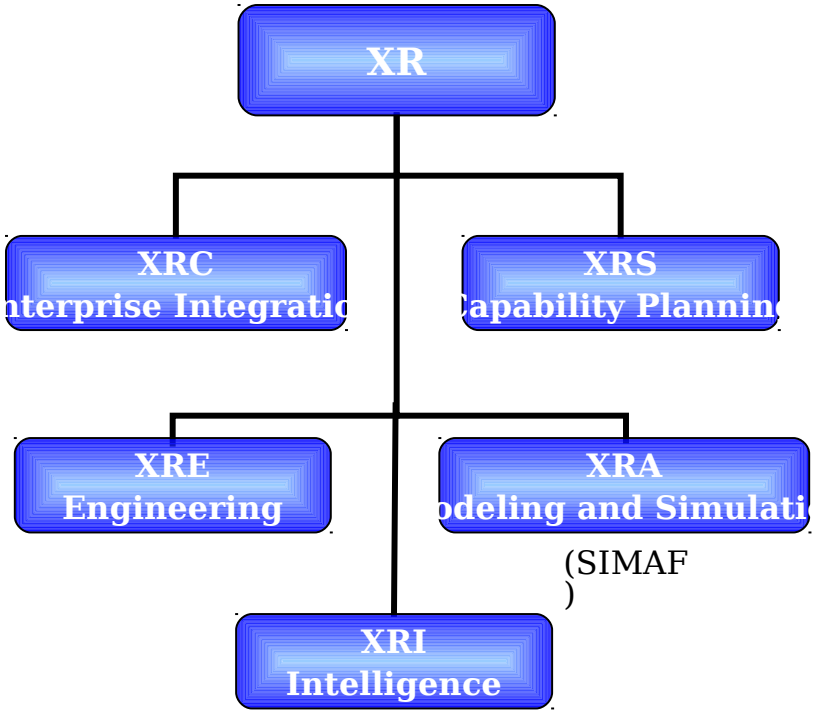
Mission

Drive aeronautical enterprise effects-based, capability focused planning to maximize efficiency in delivering war winning capability

ASC/XR
WPAFB, OH

Focus Areas, Roles, and Responsibilities

- ASC lead for capability-based planning as user requirements are being defined
  - Pre-Milestone A/B planning (prior to acquisition program start)
- Ensure capabilities are integrated to meet warfighter needs—across Wings/DRGs, services, and agencies
- Facilitate and expand capability-based planning by developing and executing initiatives, reusable tools and processes
- Ensure comprehensive intelligence planning and integration, as required,



https://www.ascxr.wpafb.af.mil